WALL MOUNT BRACKET

MODEL

BR-380WM

Installation Manual

Safety precautions

The warning marks shown below are used throughout this installation manual to prevent personal injury or property damage. Make sure you understand these warnings when reading this installtion manual.

⚠ **Warning**	This symbol indicates information that, if ignored, could possibly result in personal injury or even death due to incorrect handling.	⚠ **Caution**	This symbol indicates information that, if ignored, could possibly result in personal injury or physical damage due to incorrect handling.

⃠	Symbol indicating an action that must not be done	❗	Symbol indicating an action that should be done

⚠ Warning

The wall mount bracket is designed specially for mounting a projector to a wall.
If anything other than a projector is mounted, the weight may result in damage. If the wall mount bracket falls, it could cause personal injury or property damage.

The installation work (wall mounting) should be performed by specialists who have technical knowledge and ability.
Incomplete or incorrect installation could cause the wall mount bracket to fall and cause personal injury or property damage. Contact the customer support office listed on the Mitsubishi Projector Contact List in the User Manual for your projector when installing the wall mount bracket.

Follow the instruction in this manual when installing the wall mount bracket.
If the instructions are not followed, the wall mount bracket may fall, resulting in personal injury or an accident.

Handle the power cord carefully.
Incorrect handling may cause fire or electric shock. Observe the following precautions when handling:
- Do not handle the power plug with wet hands.
- Do not use a power cord that is damaged or modified.
- Do not pull the power cord with too much force when routing the cable through the rail bracket.

When you mount the projector on the wall with the wall mount bracket, the wall requires enough strength to hold the projector and the wall mount bracket. Confirm the mass of the projector and the wall mount bracket before installation, and maintain the strength of the wall. If the wall is not strong enough, reinforce the wall before installation.

Do not install the wall mount bracket in a place where it might be subjected to vibration or shock.
Vibration or shock could cause damage to the projector or mounting surface. It could also cause the wall mount bracket or projector to fall and cause personal injury or property damage.

Install the wall mount bracket so that it can sufficiently support the mass of the projector and wall mount bracket, and resist any horizontal vibration. Use M8 nuts and bolts.
Nuts and bolts smaller than M8 could cause the wall mount bracket to fall. Mitsubishi takes no responsibility for any damage or injury caused by incorrect installation.

Safety precautions

⚠ Warning	
The installation work should be performed by at least two qualified service personnel. If you need to loosen any screws during installation, be careful not to drop the wall mount bracket. If the wall mount bracket or projector falls, it could cause personal injury or property damage.	
Inspect the wall mount bracket on a regular basis to ensure there are no broken parts or loose screws. If there are any broken parts, stop using the wall mount bracket immediately. If the wall mount bracket or projector falls, it could cause personal injury or property damage.	
Never modify the wall mount bracket.	
Do not hang on the wall mount bracket or hang a heavy object on the wall mount bracket. If the projector or wall mount bracket falls, it could cause personal injury or property damage.	
Tighten all screws firmly after adjustment. If the screws are not tightened firmly, the projector or wall mount bracket may fall and cause personal injury or property damage.	
Never loosen the bolts and nuts after installation. Confirm that the screws have not become loose on a regular basis. If you find any loose screws, tighten them firmly. If the screws are not tightened firmly, the projector or wall mount bracket may fall and cause personal injury or property damage.	

⚠ Caution	
Do not install the wall mount bracket in a location where the operating temperature for your projector model may be exceeded. Such an environment may damage the projector.	
Install the wall mount bracket in a place free from excessive dust and humidity to prevent the lens or optical components from becoming dirty.	
Do not use excessive force when adjusting the wall mount bracket. The wall mount bracket may break, resulting in personal injury.	

Place to install the wall mount bracket

- Carry out the power supply wiring work for the installation location of the wall mount bracket in advance.
- Install the projector away from other electric devices such as fluorescent lights or air conditioners. Some kinds of fluorescent lights could interfere with the remote control of the projector.
- It is recommended to keep connection cable length less than 20 meters to reduce external noise.
- Install the wall mount bracket in a place free from excessive dust and humidity to prevent the lens or optical components from becoming dirty.

Installation

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1. Install the wall plate on the wall.
2. Attach the rail bracket to the wall plate.
3. Adjust the length of the rail bracket.
4. Secure the projector plate to the projector.
5. Secure the projector to the rail bracket.
6. Connect the power cord and other cables to the projector.

5 Adjusting the projection screen Pages 11 - 13

1. Turn on the projector.
2. Change the aspect ratio.
3. Display the test pattern.
4. Adjust the focus.
5. Fine adjust the projection screen size. (A to F)
6. After completing the adjustment, turn off the display of the test pattern.

A. Readjust the position of the rail bracket so that the rail bracket is perpendicular to the wall.

B. Fine adjust the length of the rail bracket.

C. Adjust the horizontal position of the projector.

D. Adjust the forward/backward tilt of the projector.

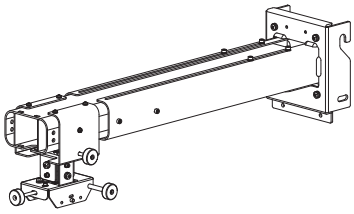
E. Adjust the horizontal rotation of the projector.

F. Adjust the horizontal tilt of the projector.

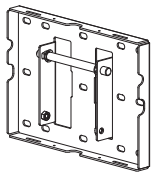
6 Attaching the covers Page 14

1. Attach the wall plate cover.
2. Attach the end cap (b) to the rail bracket.
3. Reinforce the installation strength, if necessary.

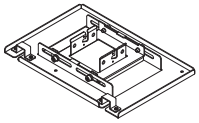
1. What's included in the box



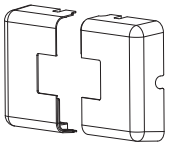
Rail bracket



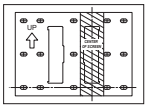
Wall plate



Projector plate

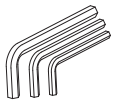


Wall plate cover

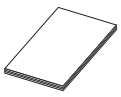


Template sheet

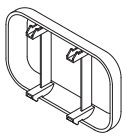
Fixing plate (2)



Hexagon wrenches (for M5, M6 and M8)



Installation manual



End cap

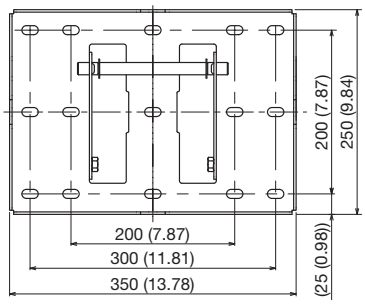
Shape	Name	Quantity	Application
	M8 x 70 mm hexagon socket head cap bolt	2	For adjusting rail bracket angle
	M8 x 20 mm hexagon socket head cap bolt with spring washer and plain washer	2	For securing rail bracket
	M6 x 14 mm cross-recessed pan head screw with spring washer and plain washer	4	For installing projector plate
	M4 x 10 mm cross-recessed pan head screw with spring washer and plain washer	7	For installing the projector (3) and for installing wall plate cover (4)
	M3 x 8 mm cross-recessed pan head screw with spring washer and plain washer	4	For securing projector plate and fixing plates

- Use the bolts and screws supplied with the wall mount bracket to install it, as directed in this manual. Do not substitute these bolts and screws with any other types.
- Use commercially available M8 x 50 mm anchors (at least 4) or 8 x 80 mm lag bolts (at least 4) to attach the wall plate to the wall. Depending on the installation condition (wall thickness, etc.), use the anchors or lag bolts which are longer than those specified.
- Gather the tools and parts you need before you begin installation.

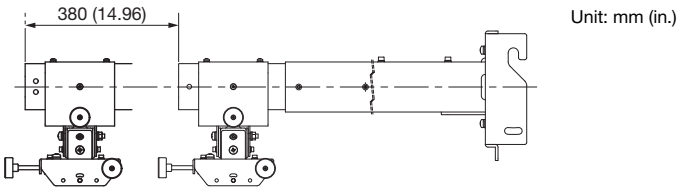
2. Specifications

Item	Specification	Remark	Reference page
Rail bracket mass	Approx. 9.5 kg	Wall plate (2.9 kg), projector plate (1.0 kg), wall plate cover (0.7 kg)	
Rail bracket forward/backward slide adjustment range	380 mm (14.96 in.)		Refer to the figure below.
Rail bracket vertical tilt adjustment range	Upward: 6° Downward: 2°		12
Horizontal slide adjustment range	±35 mm (1.38 in.)		Refer to the figure below.
Forward/backward tilt adjustment range	±7°	Fine adjustments possible with adjustment dial	13
Horizontal rotation adjustment range	±7°	Fine adjustments possible with adjustment dial	13
Horizontal tilt adjustment range	±5°	Fine adjustments possible with adjustment dial	13

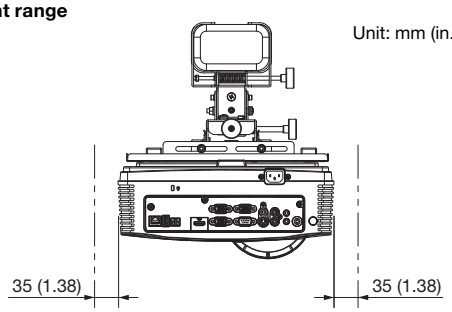
Wall plate dimension



Rail bracket forward/backward slide adjustment range



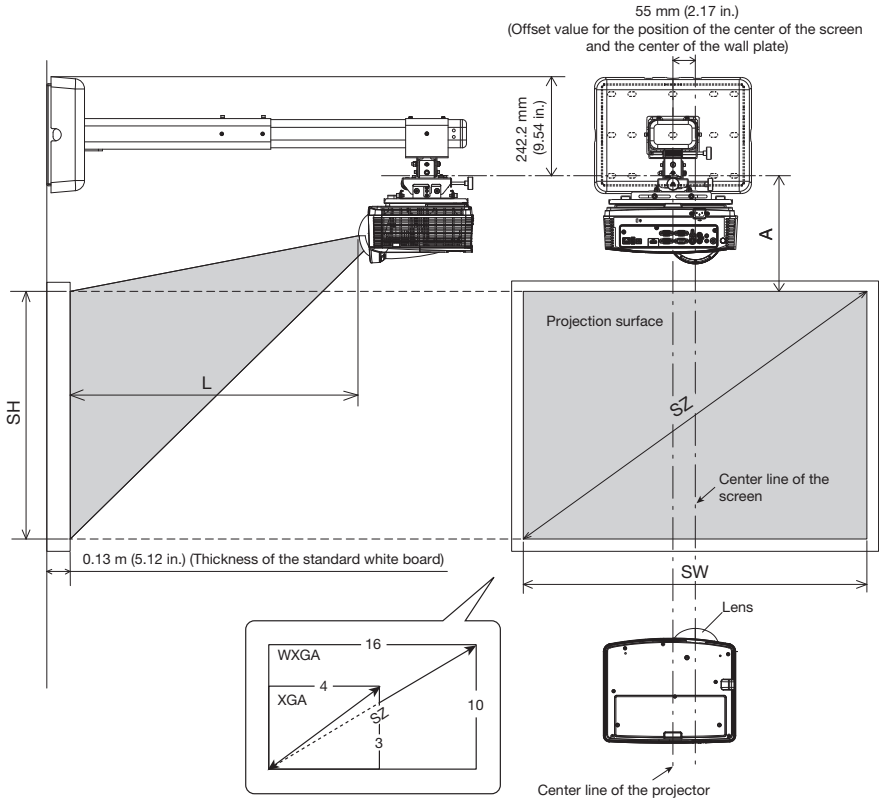
Horizontal slide adjustment range



3. Projection distance table

Refer to the table below and install the wall mount bracket and projector to project images at an appropriate size on the projection surface.

- The values are only rough estimates.



For XD360U-EST (XGA)

Screen size					L: projection distance		A: distance between projection screen and wall plate	
SZ: diagonal size	SW: width		SH: height					
inch	cm	inch	cm	inch	m	inch	cm	inch
60	122	48.03	91	35.83	0.56	22.05	28.5	11.22
65	132	51.97	99	38.98	0.61	24.02	29.9	11.77
70	142	55.91	107	42.13	0.67	26.38	30.8	12.13
75	152	59.84	114	44.88	0.72	28.35	31.9	12.56
80	163	64.17	122	48.03	0.77	30.31	33.0	12.99

For WD380U-EST (WXGA)

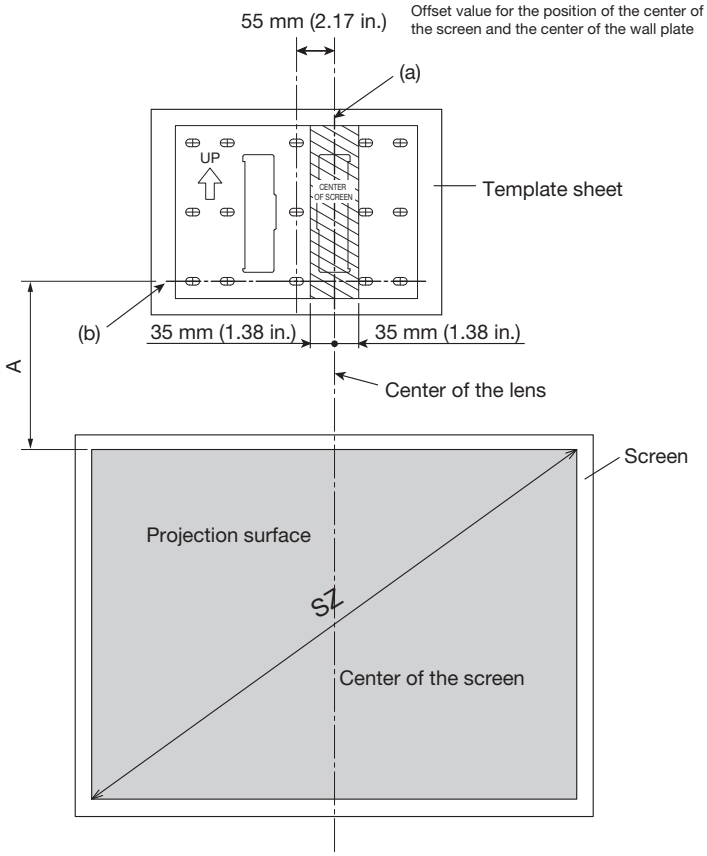
Screen size					L: projection distance		A: distance between projection screen and wall plate	
SZ: diagonal size	SW: width		SH: height					
inch	cm	inch	cm	inch	m	inch	cm	inch
70	151	59.45	94	37.01	0.56	22.05	26.6	10.47
75	162	63.78	101	39.76	0.60	23.62	27.4	10.79
80	172	67.72	108	42.52	0.64	25.20	28.3	11.14
85	183	72.05	114	44.88	0.69	27.17	29.1	11.46
90	194	76.38	121	47.64	0.73	28.74	29.9	11.77
95	205	80.71	128	50.39	0.77	30.31	30.8	12.13

4. Installation procedure

1. Install the wall plate on the wall.

(1) Determine the template sheet position.

- From the projection distance table, confirm the screen size (SZ) and the distance between the projection surface and wall plate (A).
- Align the vertical center line (a) of the CENTER OF SCREEN of the template sheet with the vertical center line of the projection surface.
  Confirm where the beams are within the wall, and shift the position left or right as necessary.
  (The position can be shifted horizontally left or right from the center line of the projection surface by up to 35 mm.)
- Align the horizontal line (b) of the template sheet with the distance of A.



(2) Attach the template sheet to the wall.

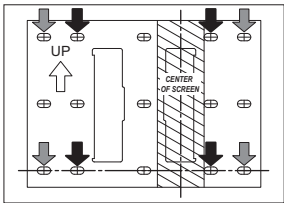
4. Installation procedure

(3) Make mounting holes in the wall in the required locations.

- The wall plate needs to be secured by commercially available anchors or lag bolts in the following places. It is recommended that the wall plate be secured in at least four places.

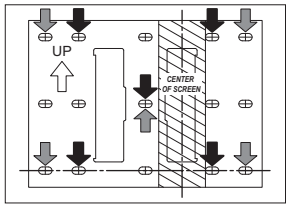
Four mounting holes

Make holes at the locations indicated by ⬇ or ⇩.



Five mounting holes

Make holes at the locations indicated by ⬇ or ⇩.



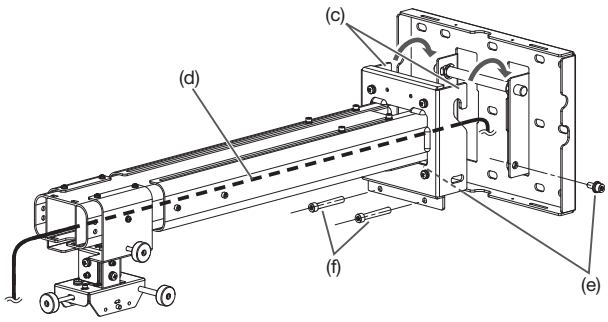
(4) Remove the template sheet and mount the wall plate on the wall.

⚠ Warning

- When you mount the projector on the wall with the wall mount bracket, the wall needs to be strong enough to hold the projector and the wall mount bracket. Confirm the mass of the projector and the wall mount bracket before installation, and maintain the strength of the wall. If the wall is not strong enough, reinforce the wall before installation.
- Install the wall mount bracket so that it can sufficiently support the mass of the projector and setting late, and resist any horizontal vibration. Use M8 nuts and bolts. Nuts and bolts smaller than M8 could cause the wall mount bracket to fall.
- We take no responsibility for any damage or injury caused by incorrect installation.

2. Attach the rail bracket to the wall plate.

(1) Hang the rail bracket hook (c) onto the wall plate bar.



(e) M8 x 20 mm hexagon socket head cap bolt (2)

(f) M8 x 70 mm hexagon socket head cap bolt (2)

(2) Pass the cables through the slider of the rail bracket. (d)

⚠ Caution

- Take care not to trap the cables between the rail bracket and wall plate.

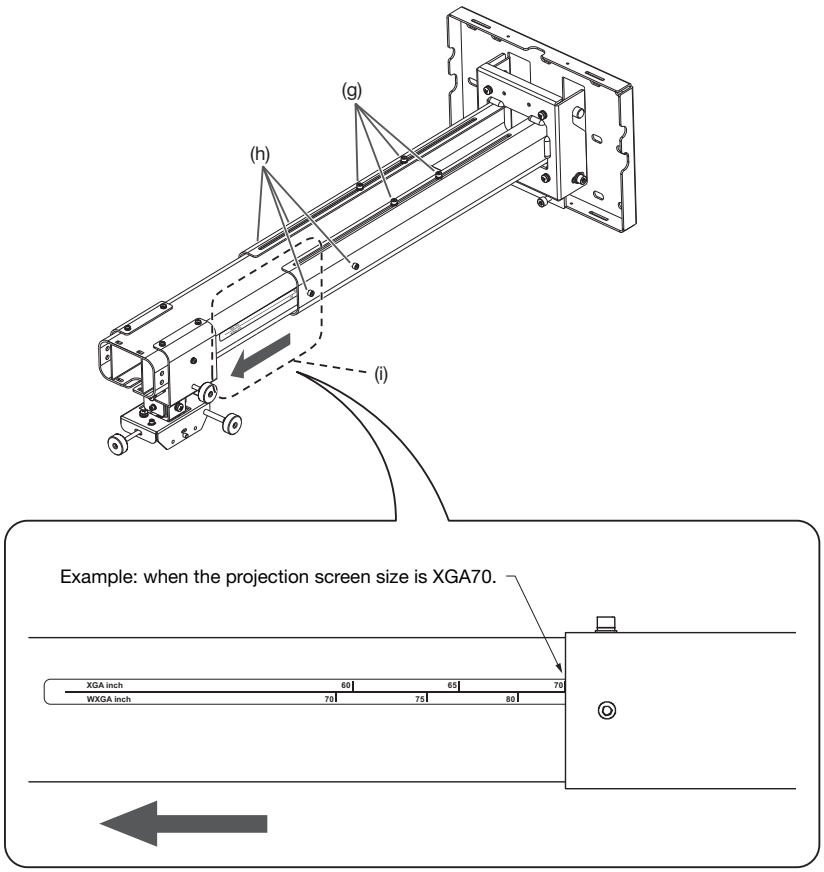
(3) Tighten the bolts (e) and bolts (f) supplied with the wall mount bracket so that the wall mount bracket becomes vertical against the wall.

3. Adjust the length of the rail bracket.

(1) Loosen the four screws (g) and four screws (h) and pull out the slider to the appropriate scale marking for the projection screen size (i).

- The scale is marked assuming that the standard white board with 0.13 m thickness is used. When the thickness of the board is other than 0.13 m, fine adjust the length of the rail bracket later. (See page 12.)

(2) Tighten the four screws (g) and four screws (h).

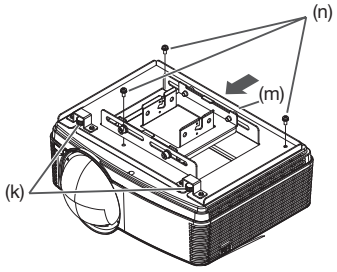


4. Installation procedure

4. Secure the projector plate to the projector.

(1) Loosen the adjustment feet of the projector (k), attach the projector plate (m) to the projector, and then secure the projector plate to the projector by tightening the supplied screws (n).

(2) Tighten the adjustment feet (k).



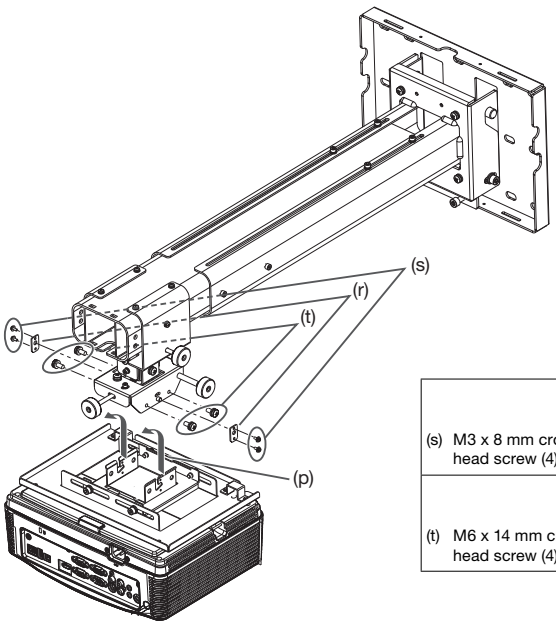
(n) M4 x 10 mm cross-recessed pan head screw (3)

5. Secure the projector to the rail bracket.

(1) Hang the projector with the assembled projector plate to the hook of the rail bracket. (p)

(2) Put the fixing plates (r) through the pin of the rail bracket and secure them with the supplied screws (s).

(3) Secure the plates with the supplied screws (t).



(s) M3 x 8 mm cross-recessed pan head screw (4)

(t) M6 x 14 mm cross-recessed pan head screw (4)

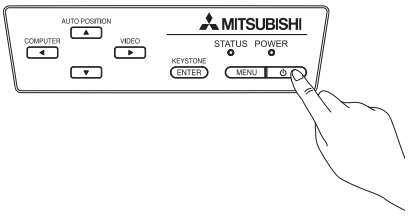
6. Connect the power cord and other cables to the projector.

5. Adjusting the projection screen

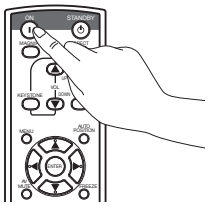
When the projected image extends off screen or distorts, adjust the screen by the following procedures.

1. Turn on the projector.

Using control panel



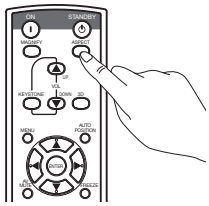
Using remote control



2. Change the aspect ratio.

(1) Press the ASPECT button on the remote control to change to the appropriate aspect ratio.

- Every time the ASPECT button is pressed, the aspect mode changes from Normal to 16:9, to Full, and back to Normal.

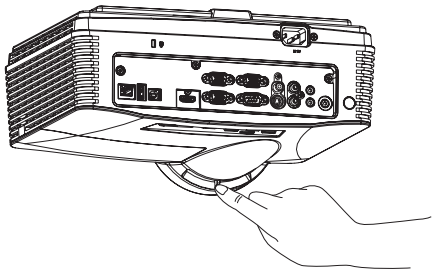


3. Display the test pattern.

Adjust the focus by using an image output from a computer. Or, adjust the focus by using splash screen of the projector.

4. Adjust the focus.

Use the focus ring to adjust the focus.



5. Fine adjust the projection screen size. (A to F)

Fine adjust the projection screen size by the methods A to F on the following pages.

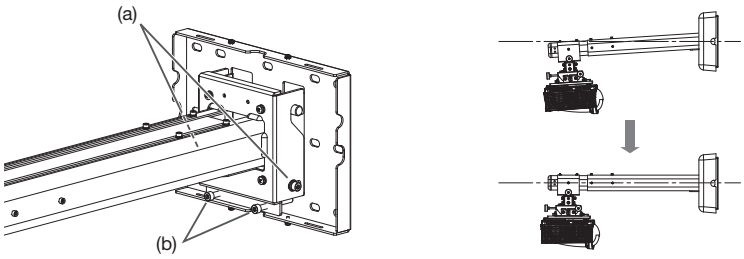
6. After completing the adjustment, turn off the display of the test pattern.

5. Adjusting the projection screen

A. Readjust the position of the rail bracket so that the rail bracket is perpendicular to the wall.

(1) Loosen the two bolts (a) and the two bolts (b) to readjust the position of the rail bracket so that the rail bracket is perpendicular to the wall.

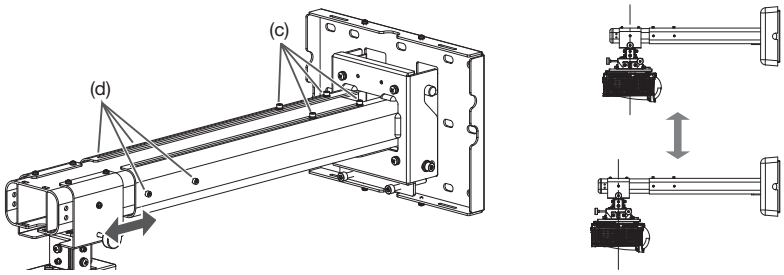
(2) After completing the adjstment, firmly tighten the bolts loosened in step (1).



B. Fine adjust the length of the rail bracket.

(1) Loosen the four screws (c) and the four screws (d) to fine adjust the length of the rail bracket.

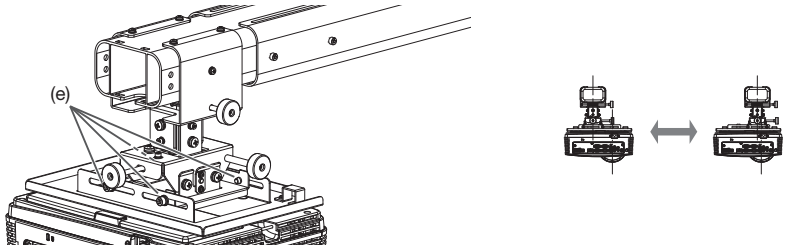
(2) After completing the adjstment, firmly tighten the screws loosened in step (1).



C. Adjust the horizontal position of the projector.

(1) Loosen the four screws (e) to adjust the horizontal position of the projector.

(2) After completing the adjstment, firmly tighten the screws loosened in step (1).

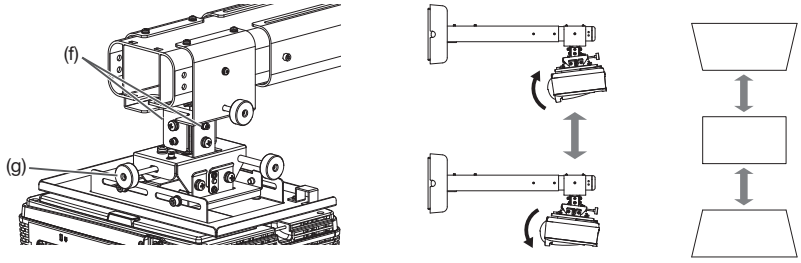


D. Adjust the forward/backward tilt of the projector.

(1) Loosen two hexagon bolts (f). (Left and right)

(2) Turn the adjustment dial (g) to adjust the forward/backward tilt.

(3) After you finish making the adjustment, firmly tighten the bolts (f).

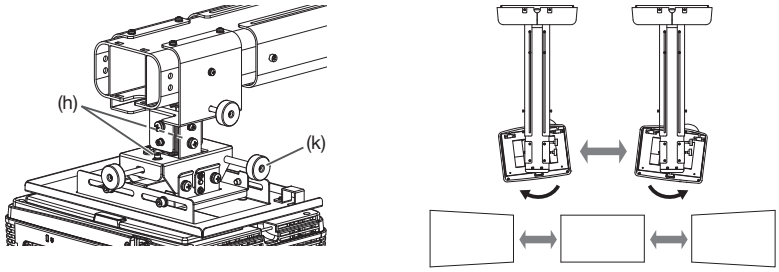


E. Adjust the horizontal rotation of the projector.

(1) Loosen the two hexagon bolts (h). (Front and back)

(2) Turn the adjustment dial (k) to adjust the horizontal rotation.

(3) After you finish making the adjustment, firmly tighten the bolts (h).

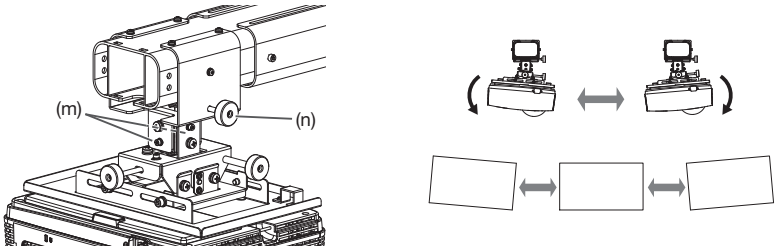


F. Adjust the horizontal tilt of the projector.

(1) Loosen the two hexagon bolts (m). (Front and back)

(2) Turn the adjustment dial (n) to adjust the horizontal tilt.

(3) After you finish making the adjustment, firmly tighten the bolts (m).

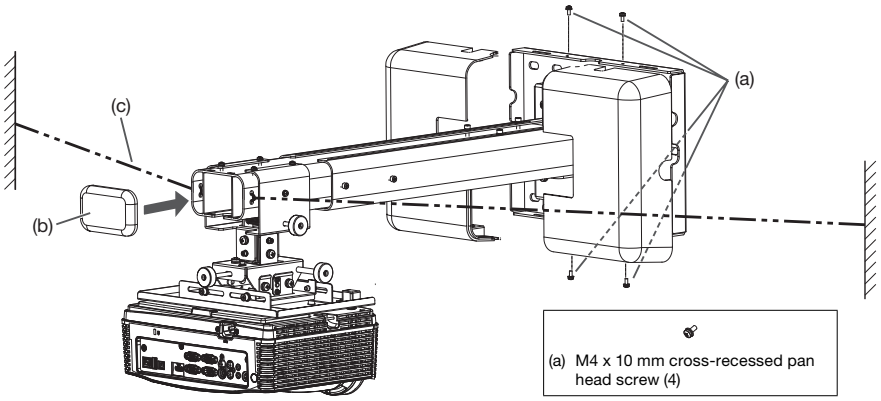


6. Attaching the covers

1. Attach the wall plate cover.

Secure the wall plate cover with the supplied screws (a).

- Depending on how the cables are wired, you may need to cut out parts of the wall plate cover to allow the cables to be passed through it.



2. Attach the end cap (b) to the rail bracket.

3. Reinforce the installation strength, if necessary.

When the projector or the projected image vibrates depending on the usage environment, use a commercially available wire or the like to reinforce the installation strength. (c)

7. ⚠ Warning

- Never loosen the bolts and nuts after installation. Confirm that the screws have not become loose on a regular basis. If you find any loose screws, tighten them firmly. If the screws are not tightened firmly, the projector or wall mount bracket may fall and cause personal injury or property damage.
- Do not hang on the wall mount bracket or hang a heavy object on the wall mount bracket. If the projector or wall mount bracket falls, it could cause personal injury or property damage.

8. Attaching a security cable

You can use a commercially available theft-prevention wire lock to secure the projector to a post or other object to prevent someone from taking it.
For details on how to lock the wire lock, refer to the user manual supplied with the wire lock.